

**KENWOOD**

# **KRC-270N**

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CASSETTE-RECEIVER

## **INSTRUCTION MANUAL**

AMPLI-TUNER-LECTEUR DE CASSETTE

## **MODE D'EMPLOI**

CASSETTE-RADIO

## **GEBRUIKSAANWIJZING**

RADIO CASETE

## **MANUAL DE INSTRUCCIONES**

KENWOOD CORPORATION

# SAFETY PRECAUTIONS

## **WARNING**

### **To prevent fire and avoid personal injury in case of accidents**

- Make sure the faceplate is securely locked in place.
- When extending the power supply, memory backup or ground lead, avoid short circuits by using 0.75mm<sup>2</sup> (AWG18) or larger automotive grade cable.
- Check to be sure that no metal objects (tools, needles, coins) are left inside the unit.
- If you smell or see smoke, disconnect the unit immediately and consult your KENWOOD dealer. Continued use can cause a fire or permanent damage to the unit.

## **CAUTION**

### **To keep the unit in proper working order**

- Be sure it's connected to a 12V DC power supply with a minus ground connection.
- Do not open front panel or top or bottom cover.
- Do not expose this unit to direct sunlight or high heat.
- Keep it clean and dry.
- Be sure it is fastened securely and not exposed to excess vibration.

**⚠ CAUTION**

**This unit is equipped with a theft deterrent faceplate. To prevent damage to the faceplate and case**

- Avoid exposure to direct sunlight and heat. High temperatures can cause deformation and warping.
- Avoid exposure to water.
- The faceplate is a high-precision instrument. When the faceplate is detached, store it in its special case. Never drop it or subject it to other shocks.

**NOTE**

- If you have difficulty in installing this unit in your vehicle, please contact your KENWOOD dealer.

**Be careful with your tapes**

- Before loading a cassette, check for slack tape. If the tape is slack, use a pencil to turn one of the spools in the cassette shell to tighten it up. Playing a slack tape can cause tape to tangle and other problems.
- Do not leave cassettes exposed to direct sunlight, high heat, or moisture. These can deform the cassette shell and make it impossible to eject.
- Avoid use of 120-minute tapes. These tapes are thin and easily become tangled.

# CARE AND MAINTENANCE

## Cleaning

1. Always turn the power OFF before cleaning.
2. Wipe the front panel and other exterior surfaces with a soft dry cloth or a soft cloth lightly moistened with a neutral detergent.

### **▲CAUTION**

- DO NOT use abrasive pads or paint thinner, benzene or other volatile solvents. These may remove the indicator characters.

## Head cleaning

As you listen to cassettes, magnetic dust and other grime accumulates around the heads and eventually causes noise that lowers sound quality. To clean the heads use a cleaning tape or cleaning kit. Both can be purchased at audio specialty or recorded music shops. Make sure you purchase a kit suited to car audio use.

	Page
■ <b>Before you begin</b>	
FEATURES .....	6
■ <b>Your new Cassette Radio</b>	
ON/OFF, VOLUME & BALANCE CONTROLS .....	7
INTENSITY .....	8
AUTO SEEK TUNING .....	9
MANUAL TUNING .....	10
LOCAL SCAN .....	11
TO PLAY CASSETTES .....	12
■ <b>Tuner features</b>	
PRESET STATIONS .....	13
AUTO MEMORY .....	14
■ <b>Cassette player feature</b>	
TUNER CALL .....	15
■ <b>Convenient features</b>	
CLOCK DISPLAYS/SETTING .....	16
THEFT DETERRENT FACEPLATE .....	17
■ <b>Installation</b>	
ACCESSORIES .....	18
INSTALLATION PROCEDURE .....	19
CONNECTIONS .....	20
INSTALLATION .....	21
■ TROUBLESHOOTING GUIDE .....	23
■ SPECIFICATIONS .....	24

# FEATURES

## ■ TUNER FEATURES

- **Auto seek tuning (p.9)**  
Automatically searches for stations you can receive.
- **Local scan (p.11)**  
When this feature is turned on, it combines scanning and Auto Memory and presets only strong stations offering good reception.
- **Preset stations (p.13)**  
Stores the frequencies of your favorite stations in memory, for one-touch tuning.
- **Auto memory (p.14)**  
Automatically stores the strongest stations you can pick up, for one-touch tuning.

## ■ CASSETTE PLAYER FEATURE

- **Tuner call (p.15)**  
Allows you to listen to the tuner while rewinding or fast forwarding a cassette.

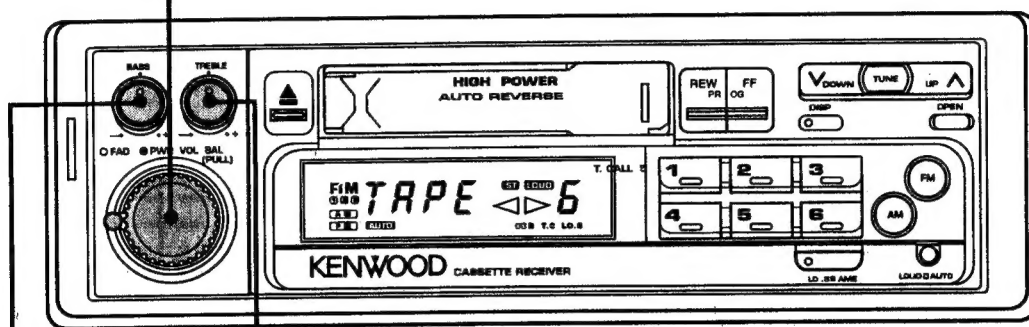
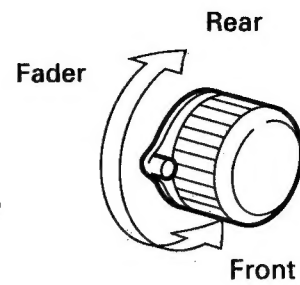
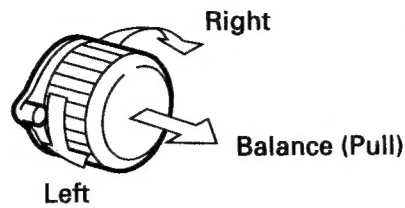
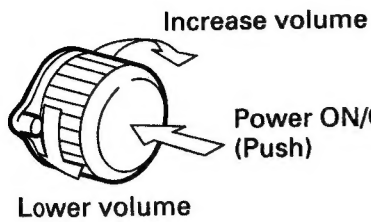
## ■ CONVENIENT FEATURES

- **Clock display (p.16)**  
Displays the time in the display window.
- **Theft deterrent faceplate (p.17)**  
When you leave the vehicle, you can take the faceplate with you, to help prevent theft.

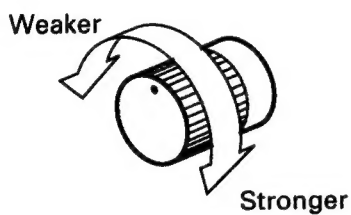
# ON/OFF, VOLUME & BALANCE CONTROLS

ENGLISH

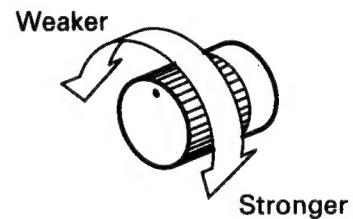
## POWER AND VOLUME



## BASS



## TREBLE



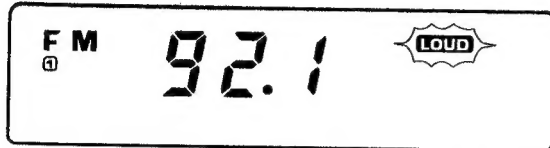
## NOTE

- Turning the power ON automatically restores the settings in use when the unit was turned OFF.
- Perform these operations with the power ON.

# INTENSITY

ENGLISH

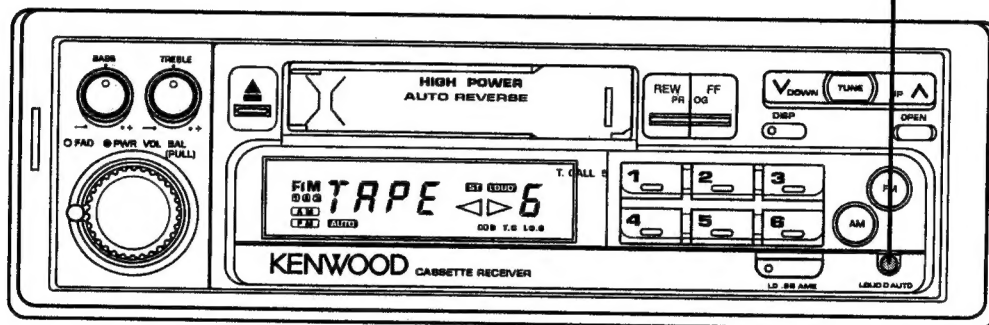
- If the Loud indicator light is not illuminated, briefly press the Loud button.  
(Loud indicator light will light up.  
*Bass volume increases.*)



ON

## TO RESTORE ORIGINAL LEVELS

- Briefly press the Loud button again.  
(Loud indicator light will go out.)





# AUTO SEEK TUNING

ENGLISH

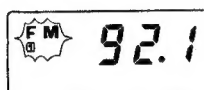
1

## To select an FM band

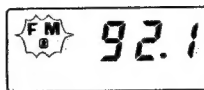
- Press the FM button to choose FM1, FM2 or FM3.

## To select an MW band

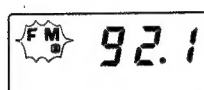
- Press the AM button.



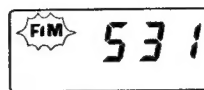
FM1



FM2



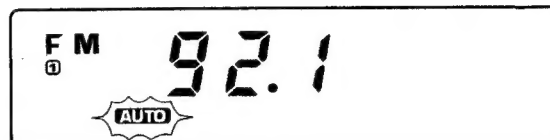
FM3



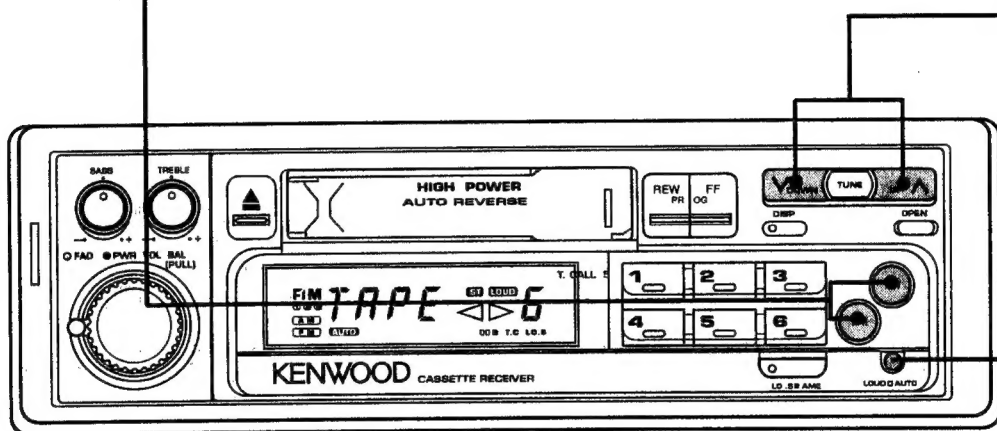
MW

2

- If the Auto indicator light is not illuminated, press the Auto button for more than two seconds to turn the Auto function on.  
(The Auto indicator light will light up.)



ON



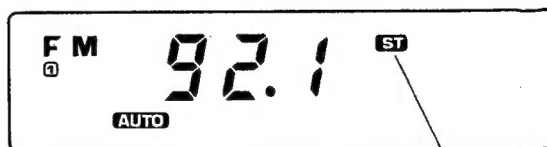
3

- Press either the Down seek or the Up seek button.  
(The Auto seek function will find the next station you can receive.)



DOWN SEEK

UP SEEK



Display shows frequency of station received.

Illuminated when FM stereo broadcasts are received.

# MANUAL TUNING

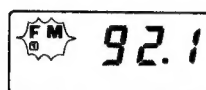
1

## To select an FM band

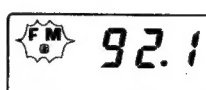
- Press the FM button to choose FM1, FM2 or FM3.

## To select an MW band

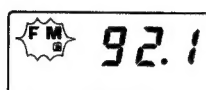
- Press the AM button.



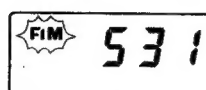
FM1



FM2



FM3

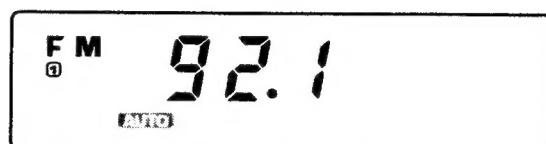


MW

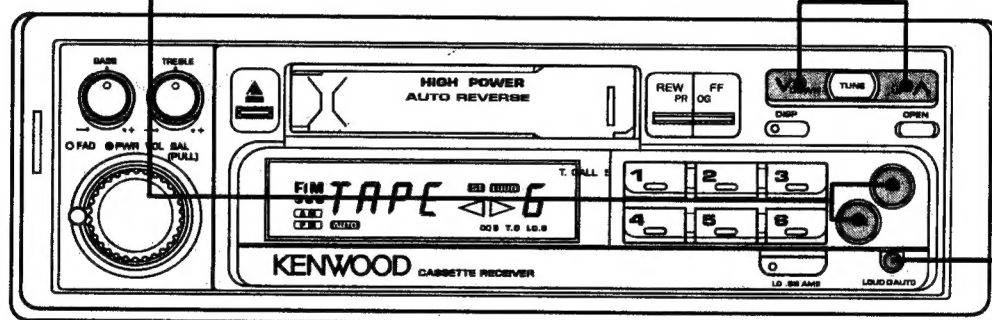
2

- If the Auto indicator light is illuminated, press the Auto button for more than two seconds to turn the Auto function off.

(The indicator light will go out.)



OFF



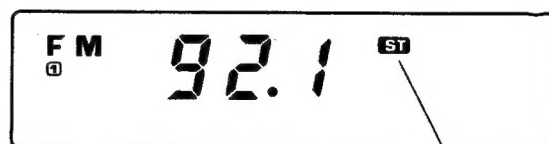
3

- Press either the down or up arrow buttons.
- (The frequency will continue to change as long as you hold the button down.)



Down: for lower frequencies

Up: for higher frequencies



Display shows frequency of station received.

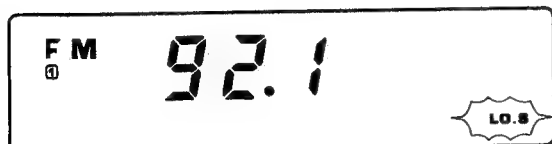
Illuminated when FM stereo broadcasts are received.

1

## To turn on Local scan

- Briefly press the Local scan button.

(The indicator light will light up.)



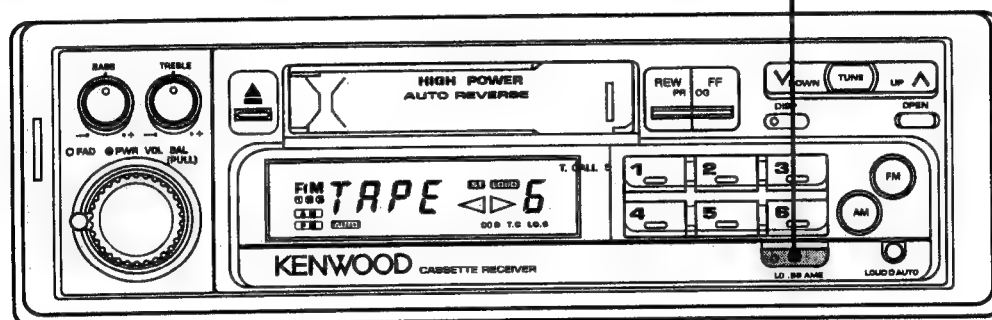
ON

2

## To turn off Local scan

- Briefly press the Local scan button again.

(The indicator light will go out.)



# TO PLAY CASSETTES

## TO PLAY

- ▶ Insert a cassette tape with the exposed tape facing to the right. (It will start to play automatically.)



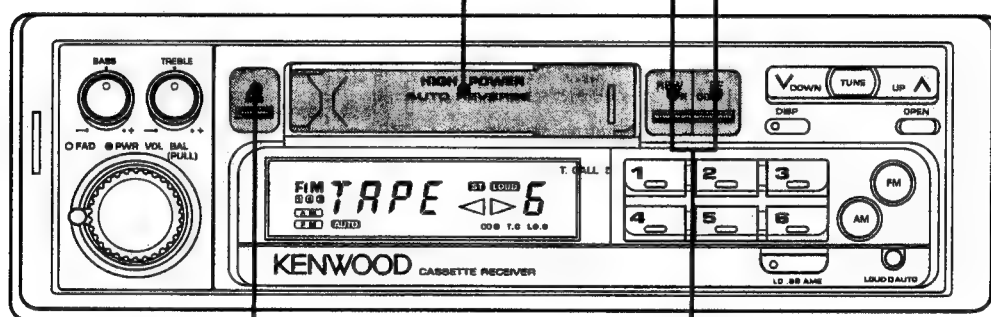
(While it plays, you will see this display.)

## TO FAST FORWARD/REWIND

Operation	Press
Fast Forward	FF
Rewind	REW

- ▶ To stop Fast forward, press REW button and to stop Rewind, press FF button.

(The ◀▶ display will blink during Fast Forward/Rewind.)



## TO STOP AND EJECT

- ▶ Press the Eject button. (The player will eject the cassette.)

## TO SWITCH SIDES

- ▶ Press the FF and REW buttons simultaneously. (The player will play the reverse side.)

## TAPE PLAY INDICATORS

When you insert the cassette with side A up.

Please note: If side B is up, the indicators will be reversed.

Indicator	Tape side playing
▶	Side A
◀	Side B

# PRESET STATIONS

ENGLISH

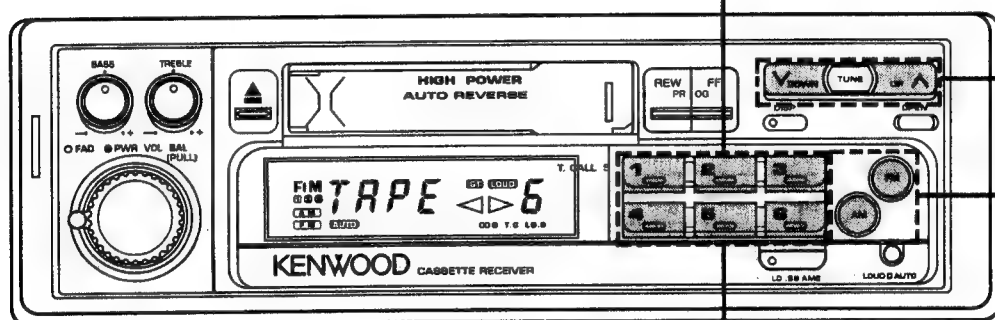
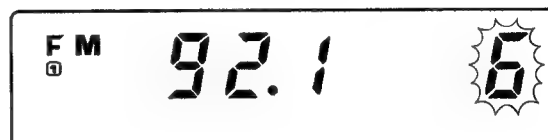
1

Select the band and station you want to preset.

2

- Press the Preset station button you want to use for more than two seconds.

(When the station is entered in memory, the number of the button to which you've assigned it will appear on the display.)

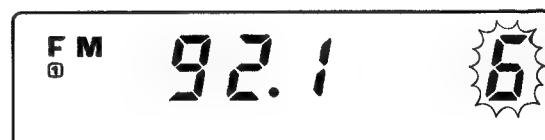


3

By repeating steps 1 and 2 you can preset each button for one station each from the FM1, FM2, FM3 and MW bands.

## 4 USING PRESET STATIONS

- Briefly press the button of the station you want.  
(When you press the button, you will hear the station assigned to it.)



## NOTE

- When you assign a preset station to a button, the previous setting will be erased.

# AUTO MEMORY

1

## To select an FM band

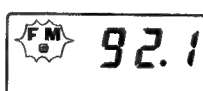
- Press the FM button to choose FM1, FM2 or FM3.

## To select an MW band

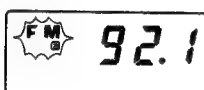
- Press the AM button.



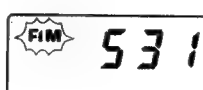
FM1



FM2



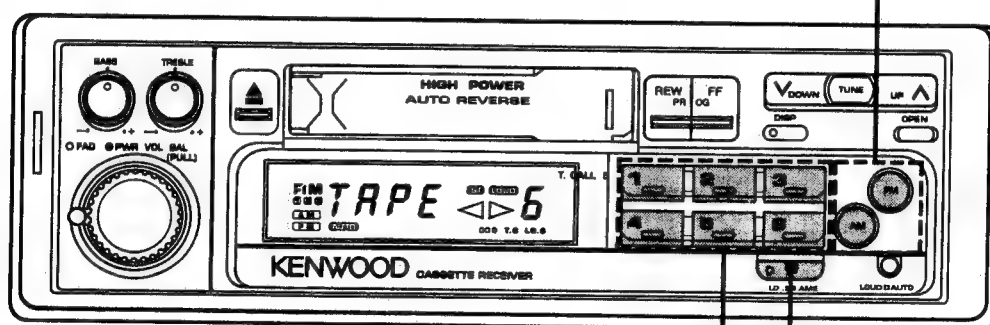
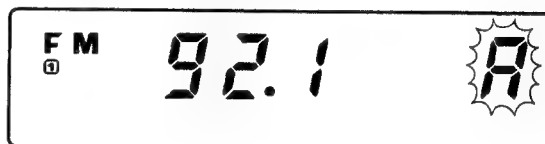
FM3



MW

2

- Press the Auto memory button for more than two seconds. (When the seek function finds a station, the "A" indicator will light up. The display will show the number of the button to which it has been assigned.)



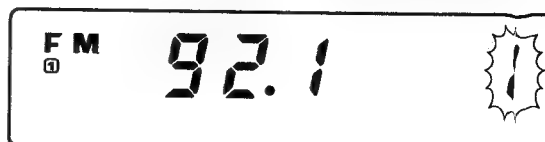
3

When six stations have been found, the Auto memory function stops. You will hear the last station selected.

4

## USING PRESET STATIONS

- Briefly press the button of the station you want. (When you press the button, you will hear the station assigned to it)



**1**

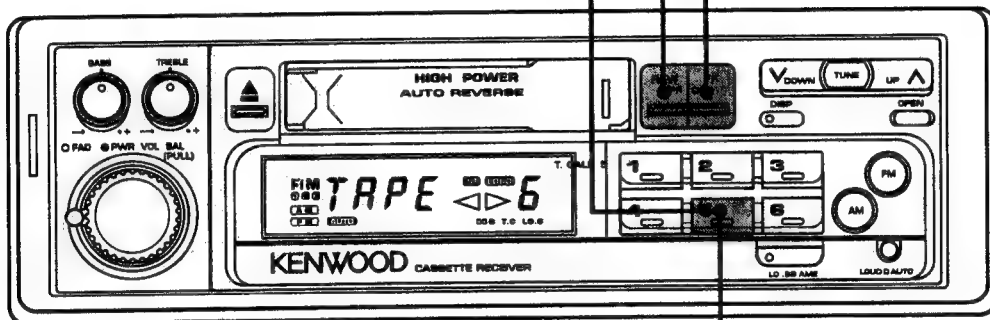
- Press the Tuner call button.  
(The Tuner call indicator will appear on the display.)



ON

**2**

- You can now listen to the tuner while a tape is fast forwarding or rewinding.



## TO STOP TUNER CALL

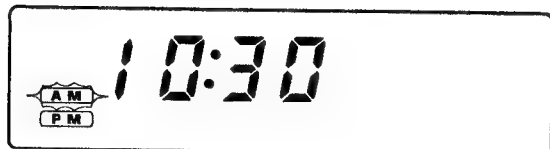
- Press the Tuner call button again.  
(The Tuner call indicator will disappear.)

# CLOCK DISPLAYS/SETTING

ENGLISH

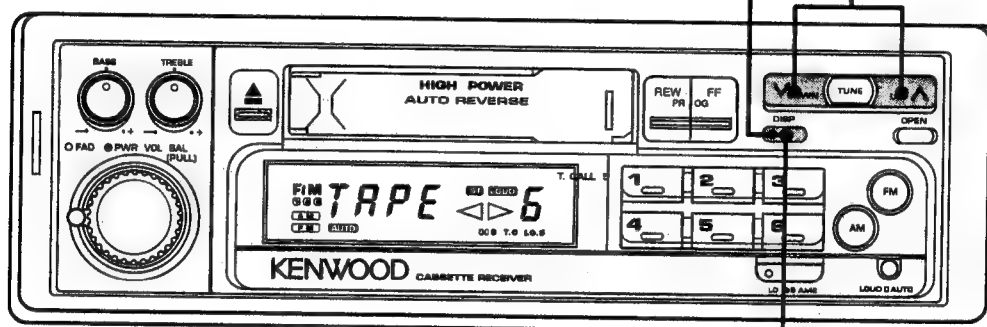
## ■ Displays change like this

- ▶ Pressing the Display button changes displays as indicated to the right.



Time Display

Mode	Displays
Tuner	Frequency ⇄ Time
Tape	"TAPE" ⇄ Time



## ■ To set the clock

**1**

- ▶ If the time is not being displayed, press the Display button.

**2**

- ▶ While holding down the Display button, press  $\nabla$  to change the hour and  $\wedge$  to change the minute.



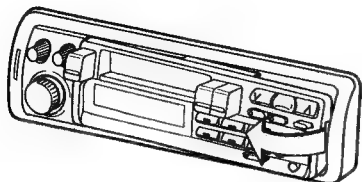
# THEFT DETERRENT FACEPLATE

ENGLISH

## ■ To remove the faceplate

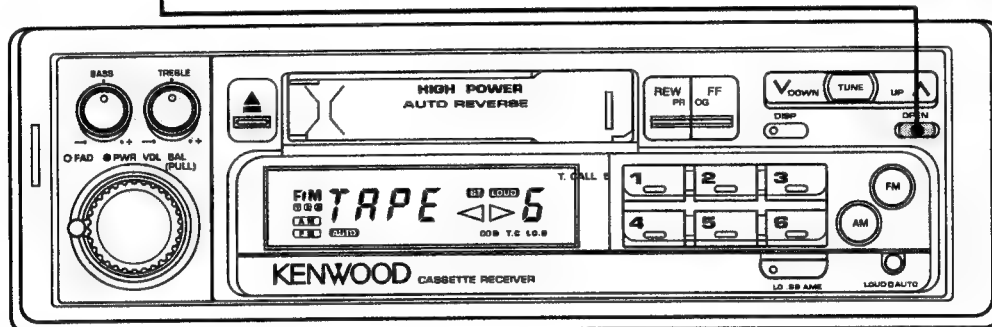
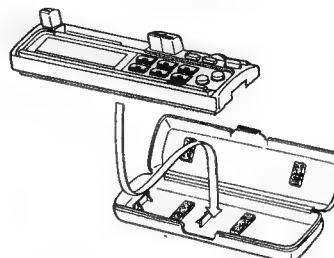
1

Press the Open button to unlock the faceplate, then remove carefully.



2

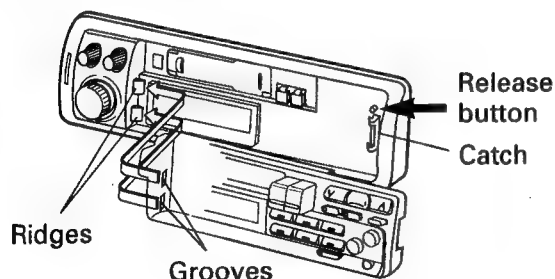
Place the faceplate in the storage case with the button side facing up.



## ■ To install the faceplate

1

Align the groove in the bottom of the faceplate with the ridges on the faceplate mount.

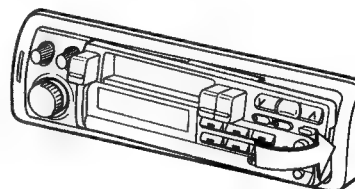


### NOTE

- Press the Release button to disengage the unit from the catch.

2

Press on the upper part of the faceplate until it locks in place.

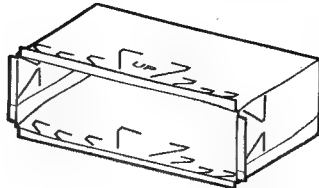
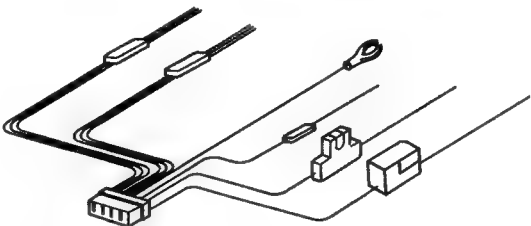
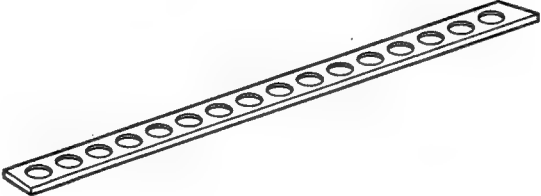
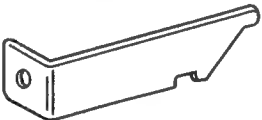
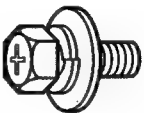


## NOTE

### Disabled system indicator

- To deter theft, this unit is equipped with a Disabled system indicator. Turn power OFF while holding down preset station buttons "1" and "3". When power is turned ON again, the Disabled system indicator can be turned ON and OFF.

# ACCESSORIES

Part Name	External View	Number of Items
Mounting case		1
Wiring harness		1
Metal mounting strap		1
Removal tool		1
Assembly screw with washer (M4 x 8)		1

# INSTALLATION PROCEDURE

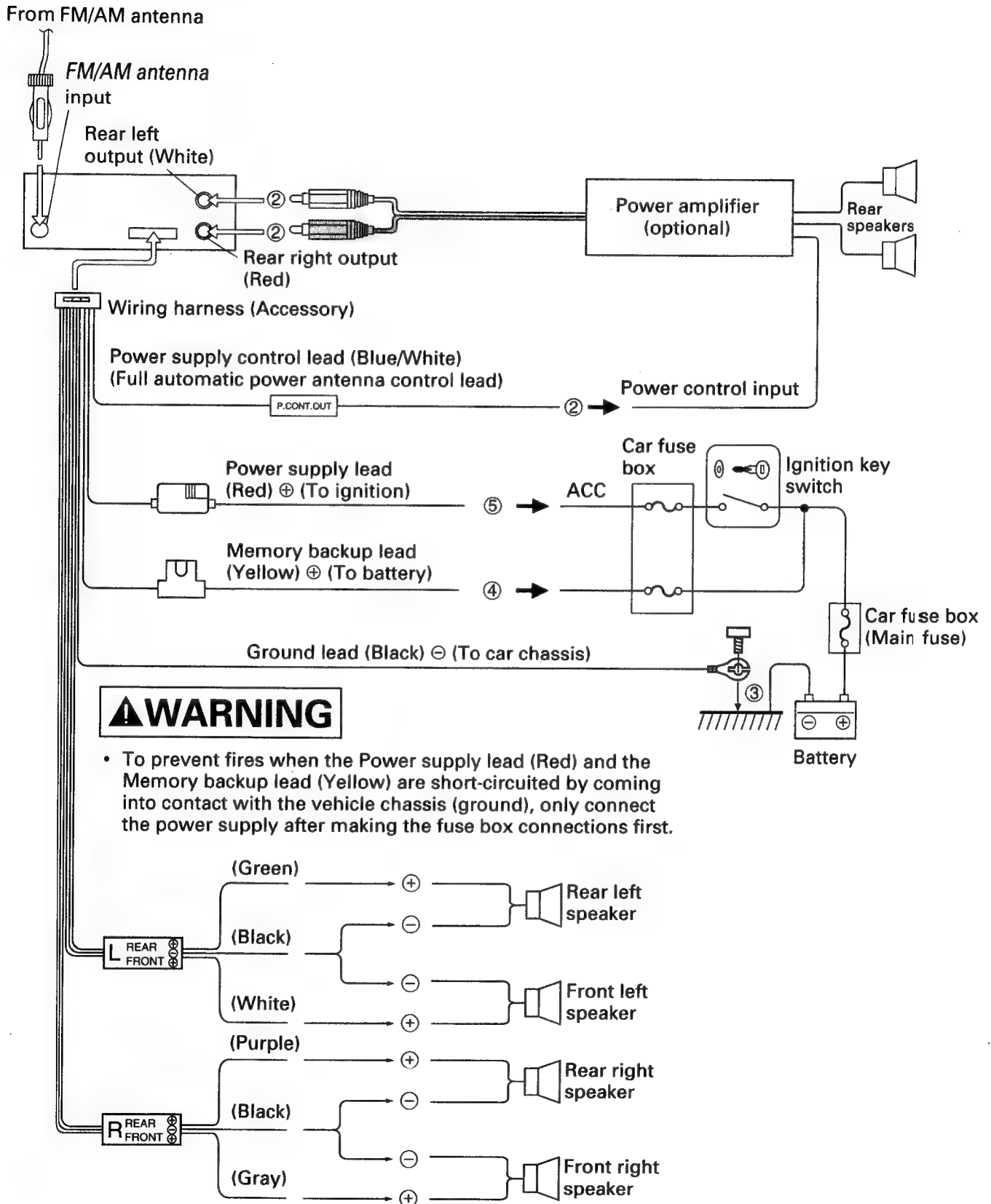
- ① Before starting installation, disconnect the negative (–) terminal of the battery. This will prevent short circuits.
- ② Connect the Input and Output leads (☞ p.20).
- ③ Connect the Ground lead (Black) to the metal body of the car (☞ p.20).
- ④ Connect the Memory backup lead (Yellow) (☞ p.20).
- ⑤ Connect the Power supply lead (Red) (☞ p.20).
- ⑥ Install the unit in the car (☞ p.21).
- ⑦ Connect the negative (–) terminal of the battery.

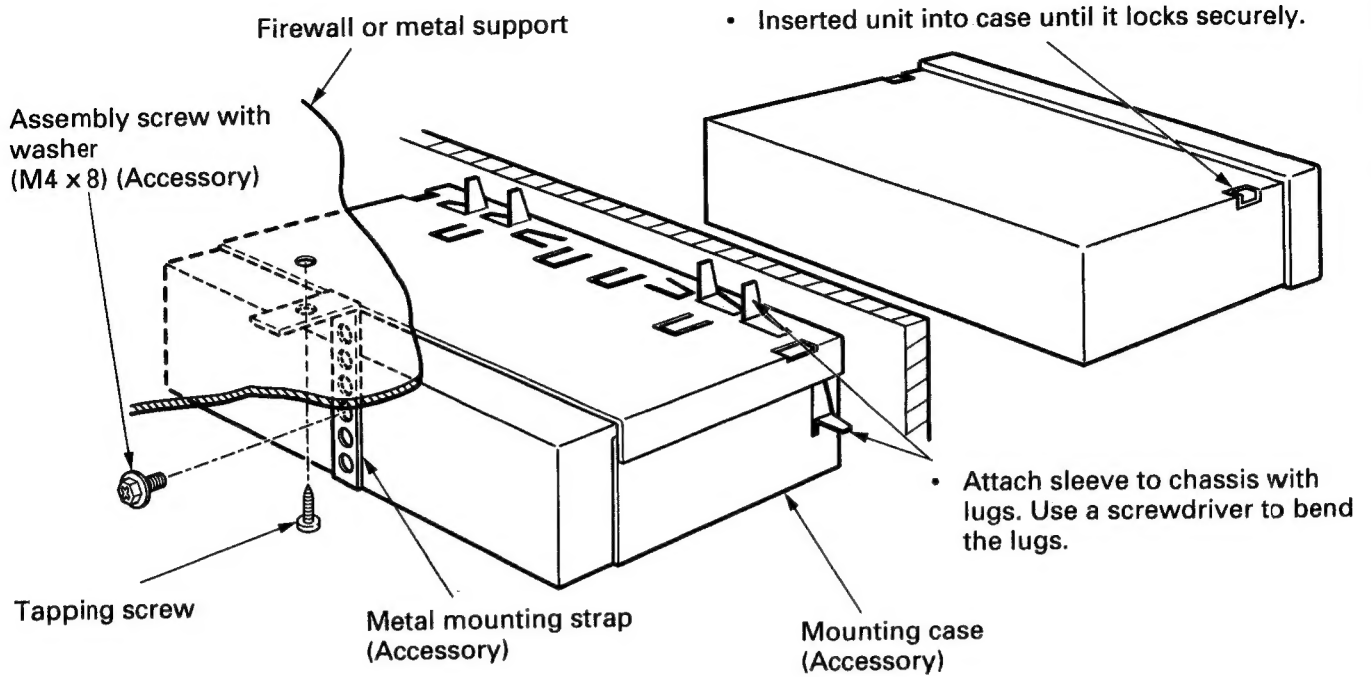
## **▲ CAUTION**

- A short circuit may cause a blown fuse. A short circuit is a serious problem that could also cause a fire. Check the wiring carefully and, if any wires are short-circuited, rewire immediately. If no short-circuits are found, replace the fuse with one having the same rating (see indication in fuse box).
- Check that no unconnected wires or connectors are in contact with the body of the car. Extraneous noise or current entering the system can cause malfunction or damage.
- To provide more power, this product is equipped with a BTL (Balanced Transformer Less) system. But in this type of system, sharing different speaker terminals or connecting or grounding speaker terminals to the car can cause distortion or damage.
- Please check that all electrical equipment in the car functions normally after installing the unit.

# CONNECTIONS

\* Circled numbers indicate the procedures described on page 19.

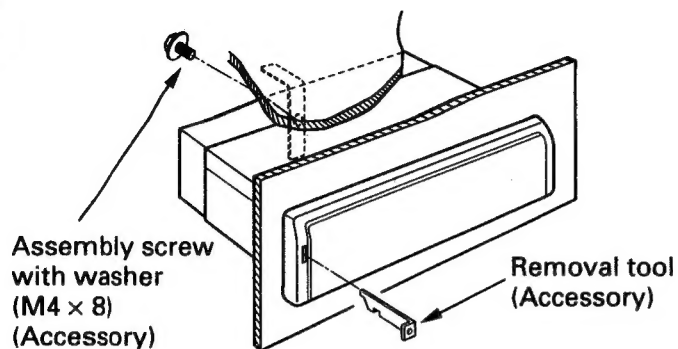




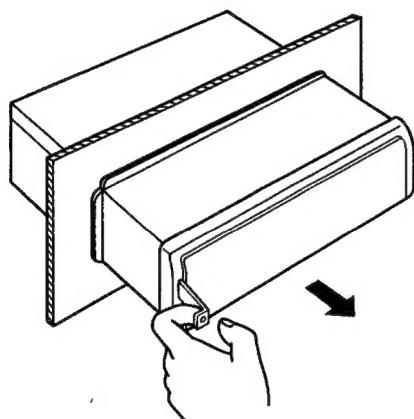
# INSTALLATION

ENGLISH

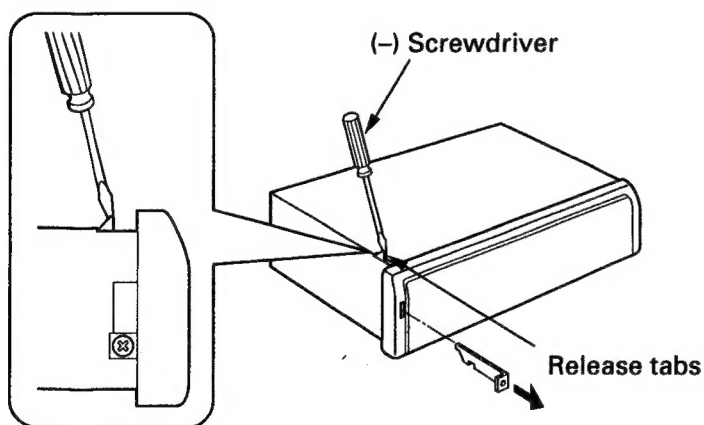
## ■ To remove the unit



1. Remove the assembly screw with washer holding on the back panel. Then insert removal tool into slot.



2. Use the removal tool to pull out the unit.



3. While using a screwdriver to press down the release tabs on the side of the chassis, pull out the removal tool.

# TROUBLESHOOTING GUIDE

Often, what appears to be a malfunction is due to user error. Before calling for service, please consult the following table.

Symptom	Cause	Remedy
No sound from one channel.	The balance/fader control is turned all the way to one side.	Adjust the balance/fader control.
Poor reception.	The antenna is not extended.	Extend the antenna.
Sound quality is poor.	The tape head is dirty.	Use a head cleaning kit to clean head.

# SPECIFICATIONS

Specifications subject to change without notice.

## FM Tuner Section

Frequency Range .....	87.5 MHz - 108.0 MHz
Usable Sensitivity (DIN) .....	1.1 $\mu$ V/75 ohms
Stereo Sensitivity (S/N = 46 dB) .....	1.6 $\mu$ V/75 ohms
Frequency Response ( $\pm 4.5$ dB) .....	30 Hz - 15 kHz
Signal to Noise Ratio (IEC-A) .....	68 dB
Selectivity (DIN) .....	70 dB
Stereo Separation (1 kHz) .....	35 dB
19 kHz Carrier Leakage .....	65 dB

## MW Tuner Section

Frequency Range .....	531 kHz - 1611 kHz
Usable Sensitivity .....	30 $\mu$ V

## Cassette Deck Section

Tape Speed .....	4.76 cm/sec.
Wow & Flutter (WRMS) .....	0.12% (WRMS)
Fast Winding Time (C-60) .....	100 sec.
Frequency Response (120 $\mu$ s) .....	30 Hz - 14 kHz (+4 dB, -6 dB)
Stereo Separation (1 kHz) .....	40 dB
Signal to Noise Ratio .....	52 dB

## Audio Section

Maximum Output Power .....	25 W $\times$ 2 or 15 W $\times$ 4
Output Power (10% THD, 1 kHz, 4 ohms) .....	20 W $\times$ 2
(1% THD, 1 kHz, 4 ohms) .....	15 W $\times$ 2
Tone Action .....	Bass: 100 Hz $\pm$ 10 dB Treble: 10 kHz $\pm$ 10 dB
Preout Level/Impedance .....	800 mV (MAX.)/600 ohms

## General

Operating Voltage .....	14.4 V (11-16 V allowable)
Current Consumption .....	6 A at Rated Power
Dimensions (W $\times$ H $\times$ D) .....	188 $\times$ 58 $\times$ 171 mm
Installation Size (W $\times$ H $\times$ D) .....	182 $\times$ 52 $\times$ 153 mm
Weight .....	1.4 kg